

## MMSE RECEPTION OF DS-CDMA WITH TRANSMIT DIVERSITY

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## Abstract of the Disclosure

A pilot signal enters a first MMSE receiver (201) and a second signal enters a second MMSE receiver (202). The first MMSE receiver (201) performs a channel estimate for the received pilot signal, determines a mean-square error of the pilot signal, and operates to minimize the mean-square error of the pilot estimate by constantly updating a weighting vector. An estimate of the pilot channel exits the first MMSE receiver (201). The MMSE weighting vector (206) is also fed into the second MMSE receiver (202) and is applied to the second channel. Symbol estimates (or in other embodiments, chip estimates) exit the second MMSE receiver (202) and enter channel circuitry (204), where normal channel processing occurs.